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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,613	02/16/2006	Volker Diehl	285909US0PCT	9562
22850	7590	01/17/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KEENAN, JAMES W	
			ART UNIT	PAPER NUMBER
			3652	
			NOTIFICATION DATE	DELIVERY MODE
			01/17/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

**Application No.**

10/568,613

**Applicant(s)**

DIEHL ET AL.

**Examiner**

James Keenan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/16/06, 10/15/07</u> | 6) <input type="checkbox"/> Other: ____  |

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1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
  - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
  - (f) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (g) BRIEF SUMMARY OF THE INVENTION.
  - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (i) DETAILED DESCRIPTION OF THE INVENTION.
  - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
  - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
2. The information disclosure statement filed 10/15/07 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

This applies to reference AX only.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 5-8, the recitation that the filling aid “has no elements which extend radially outward ... and whose projection ... has a larger area than ... the flexible body” is ambiguous, in that it could be interpreted as meaning that there are simply no elements which extend outward from the flexible body, or that there are such elements, but the projection of these elements does not have a larger area than that of the cross section of the flexible body. Because a filling aid without any outwardly extending elements would inherently meet the second requirement, the claim will be interpreted as if no outwardly extending elements are required. It is also noted that the drawings do not appear to actually show such a “projection onto a plane perpendicular to the longitudinal direction of the filling aid”; therefore, it is not entirely clear exactly what this limitation even means.

Claim 6, however, in requiring spacers which do extend perpendicularly to the longitudinal direction of the filling aid, seems to contradict claim 1.

Furthermore, it also appears as if the rigid terminating element, as recited in claim 5, contradicts claim 1, because, as best understood, it would seem to have a projection with a larger area than the cross section of the flexible body.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hundtofte (US 3,608,751) or Bayer et al (EP 548,999) both cited by applicant, in view of James (US 3,749,258).

Hundtofte and Bayer both show a method of loading catalyst particles into small diameter tubes essentially as claimed, including the use of a filling aid having a flexible elongated body and either no radially extending elements at all (Hundtofte, col. 3, lines 48-51) or radially extending elements which, as can best be determined, do not have a projection on a plane perpendicular to the longitudinal direction of the filling aid with an area larger than the cross section of the flexible body (Bayer, col. 3, lines 11-16), it being noted that the "substantially transverse damper means" is believed to meet the indefinite claim limitations noted above, wherein the filling aid is gradually withdrawn from the tube as the particles are loaded such that the lower end of the filling aid remains above the level of particles in the tube.

Neither reference teaches the tubes to have an internal diameter of less than 50 mm (Hundtofte teaches 3-5 in., i.e., @ 75-125 mm; Bayer teaches 100 mm) or a ratio of the cross section of the filling aid to that of the tube to be within the range of .003 to .08 (Hundtofte teaches @ .10 to .16; Bayer does not teach a specific ratio but it is clear from the disclosure that it is quite small and likely within the range specified in the claim).

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James shows a similar method of loading catalyst particles into tubes, wherein the diameter of the tubes can be as small as 1.5 in. (@ 38 mm) and the ratio of the cross section of an elongated flexible filling aid 34 to that of the tube, while not explicitly specified, is clearly very small and likely within the required range (see col. 3, lines 1-7).

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the method of either Hundtofte or Bayer et al by loading particles into tubes with an inner diameter of less than 50 mm and a filling aid to tube cross sectional ratio between .003 and .08, as taught and/or suggested by James, as it has been held that where the general conditions of a claim are met, discovering an optimum size or range involves only routine skill in the art, and because such a size and range are known in the art.

Re claim 5, note "rigid terminating element" 30 of James.

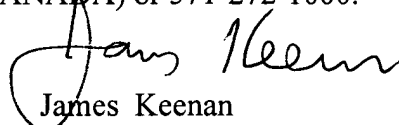
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James Keenan  
Primary Examiner  
Art Unit 3652

jwk  
1/11/08